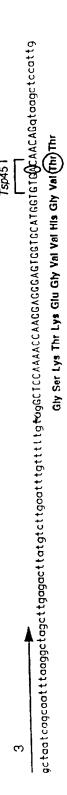
Figure 1



tgettalateapagatgataintaaagtatelagigatingigigigeecegiateaagaiteelaigaaatigipaaacaateaetgageatelaagaacaiate

2

Figure 2

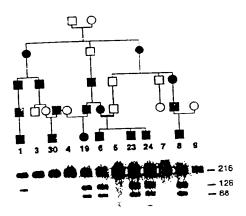


Figure 3

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Homo sapiens Rattus norvegicus Bos taurus Serinus canaria Torpedo californica	Homo sapiens Rattus norvegicus Bos taurus Serinus canaria Torpedo californica	Homo sapiens Rattus norvegicus Bos taurus Serirus canaria Torpedo californica	Homo sapiens Rattus norvegicus Bos taurus Serinus canarta Torpedo cattornica
10 20 30 10 10 1 10 1 10 1 10 1 10 10 10 10 10	40 1 V G S K T K E G V V H G V A E K T K E Q V T N V G G A V V T G V T A V A Q K T V E G A G S I A V G S K T K E G V V H G V T T V A E K T K E Q V T N V G G A V V T G V T A V A Q K T V E G A G N I A V G S K T K E G V V Q G V A S V A E K T K E Q A S H L G G A V V T G V T A V A Q K T V E G A G N I A V G S R T K E G V V H G V T T V A E K T K E Q V S N V G G A V V T G V T A V A G V D I A V G S R T K E G V V Q S V N T V T E K T K E Q A N V V G G A V V A G V N T V A S K T V E G V E N V A	10 120 120 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.	140 1
NE NE NE	40 40 40 51	8 8 8 6 7 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0	130 130 124 133 140

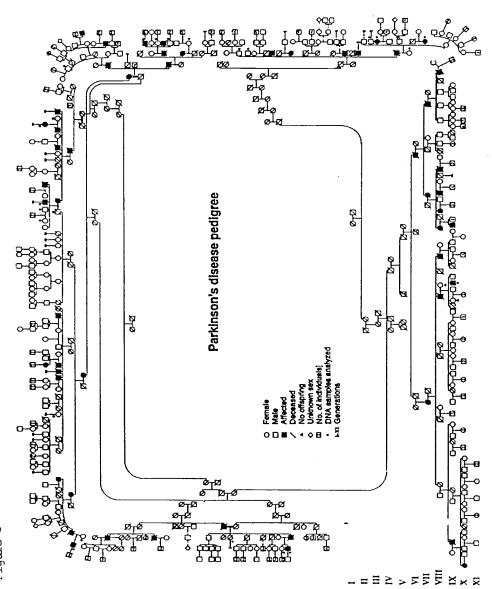


Figure 5

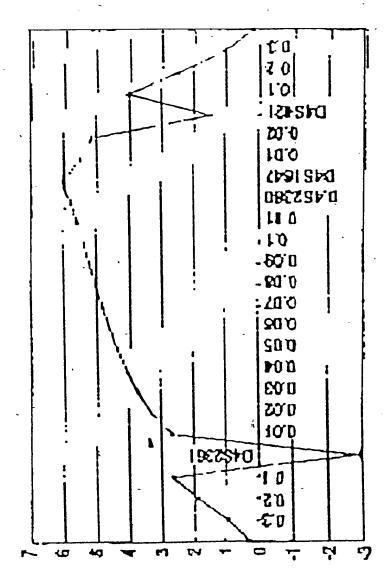


Figure 6

ron score

Figure 7

alama I	5'	3'	gene	
clone	T84229	T88834	alpha	
109979	T83410		alpha	
111088	T83411	T81593	alpha	
111090 130048	R11619	(R19409)	alpha	
135534	R31354	R32856	alpha	
141246	R66663	R67383	alpha.	
145594	R78091	R77746	alpha	
171906	H19290	H19291	beta	
172284	H19556	H19474	beta	
172749	1110000	H19685	beta	
175546		H41126	beta	
193174	H47503	H47504	alpha	
210768	H66914	H66869	aipha	
213616	H70324	H70325	alpha	
236027	H62070		alpha	
248153	N53829	N73325	alpha	İ
24991	(T80528)	R39000	alpha	
26298	R13508	(R20629)	elphe	l
265817	N28661	N21457	alpha	l
266628		N22757	alpha	ľ
27342		R37173	alpha	1
280344	(N50305)	N47094	alpha	ı
290894	1- \.	N72005	alpha	1
294142		N68597	alpha	1
307787	W21278		alpha	Į
340635	W56712	W56757	alpha	1
340683	W55986	W56276	alpha	1
346647	W94390	W74638	alpha	1
346796	W79685	W79784	alpha	1
359349	AA010546	AA010547	alpha	1
364632	AA022809	AA022690	alpha	4
39915		R50455	beta	4
40764	R56327	R56245	alpha	4
45086	H08908	H08824	alpha	4
46607	H10267	H10213	alpha	4
49811	H29080	H28976	alpha	4
50202		H17962	beta	4
50470		H16811	beta	4
66473	R16018	R16119	alpha	-1
667794	AA258686			-1
69907	T48654	T48655	alpha	4
72391	AA39409			4
739009	AA42158		beta	┥
739014				┪
771303		AA44363		┪
2-4		L36675 L36674		٦
2-5		F01363		┪
c-01f06				7
0-1rb08				\neg
c-2td12				
c-28f08			beta	
EST014			gamma	
(HRBAA		·		
EST191	4 4 0 4 7 4	29	beta	
EST220			alpha	

Figure 7 cont.

EST26845	T28079		beta
EST31489	AA328063		alpha
EST68G11	W22518		gamma
F1-625D	R29481		alpha
GEN-129D09	D61090		beta
hbc590	T11070		alpha
HIBBA65	T08213	T08212	alpha
	HR70E3R	HR70E3F	alpha
HSNACP0		U46896- 46901	alpha
KK1311	N83633		alpha
.,,,,,,,,		D318839	alpha
		L08850	alpha
	T28735		alpha
	Z20502	·	alpha

Figure 8

10	20	30	40	50	60	70
10	سلسياب	بليسيلي			CCTCCAAGII	TGCA 70
CCGCCGCAGCCGCCG AGGGGCCCGGGAXAA	CTCCATCCCCAG	CCCCGGCCC	CCCATCCC	AGGGTTTCAA	GGGACGCTAGG	AXTX 140
* CCCCCCCCCC A X A A	AAAXLGAGCAGI	4000		A CA A A CCCCCC	A CCCCCCCC TC AL	3333 II. Z 10
TOCCOCCOCCCCCCCCCCCCCC	IST TUBURCIONS	JONG . DEC.		~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	CTCCCCICAGA	AGTGU 200
CAGAAGGGCXCCGCG	GTCTCGGGAGIA		CAGGCCGCC	AGGATGGACG	TGTTCATGAAG	GGCC 350
CAGAAGGGCXCCGCG	GIGCCCGIGIA	100000.	390	400	410	420
360	370	380	3,0		· · · · · · · · · · · · · · · · · · ·	<u> </u>
TGTCCATGGCCAAGG				AGCAGGGGGT	CACCGAGGCG	GCGGA 420
TGTCCATGGCCAAGG GAAGACCAAGGAGGG	COTCCTCTACE	TOGGTGGCX	GGGGGCXG	GTTTCTGGGG	CTGCAGGGCT	20000 490 70400 560
GAAGACCAAGGAGGC TCCCCCTACAGTGTC	000000000000000000000000000000000000000	GGGTCCCGG	GAGGGGGG	TTCTGGGCAAG	XAXIAIXAX	CCCCA 630
TCCCCCTACAGTGTC AGATGGGGCXAGGTC	AYCAYGGGTCA	TAAGGGACAT	LACCCAXCC	CATAGAAXCCI	GGGICIGIAI	TYATA 700
AGATGGGGCXAGGTC	GCGGGCTGATGA	GGTGGGGGGG	CTCCAXCTG		ACCAXIGCAX	770
710	720	/30				170
,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		لبييليين		TAGETATOTO	TOTTOACAC	TITCI 770
AAAXCACACAXCCT	CCTTTTTCTIAT	CTTTTTTAC	CATTALIAA	TOTALTOTAL	TOTTACHOR	ACAGG 840
GTATGCCAAGIALI	GGGTAAAATGTC	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	4 COTTCA	CAAACCCTTC	A A T T C A A T G T C	AGIIC 910
TAACGGAAACIGGG	CHILLLAITUU	MUNITALITY		AACCCCCACA	1747 <i>0</i> 7474	10GC11 960
TAAGGGAAACTGGG AGCCAATTTCTTAG CCCAGGGCTGGGGA	TGGTGGAACCA	A CCCCCCCCC	GGCAGAGGA	CTTGACACAG	CACTGGCCCTC	CAGCCA 1050
CCCAGGGCTGGGGA	AAAGIGAAGIG	, Adda da	1090	1100	1110	1120
1060	1070	1080 لىيىلىيى	· ·	ببيتلنييل	سسلسب	11111
ACATCCACTAGAG	LILLLLLLLLLLLLLLLLLLLLLLLLLLLLLLLLLLLL	CCATCAGGTG	GGAGAGAA	CTGCAACCCTT	GCAGACAGAG	STGTGG 1120
ACATCCACTAGAGO GGCCCAGTGCAGTO	COLL FOR COLCE	CTTAACATG	GGGTGCAG	GTTGTAGGATX	TGGGGACCCA	AGGAGG 1190 GCGCAG 1260
GGCCCAGTGCAGTC CAGTGACGGGGCC	TOLOGICATION	CTGTAATCA	CATGCTGT	GCTGGAGTTTC	TGTTCCCICA	GUGUAG 1200 GTGTGG 1330
CAGTGACGGGGCCAGTCCTTAAATGT	CCCCCTTTTTCT	XCCCIGCAG	GAAGCAAGA	CCCGAGAAGGT	GIGGIACAAG	AACCAG 1400
AGTCCTTAAATGT CITCAGGTACTAG	CCCAGCCCTGGC	ACCAGCCCT	TCTCTCAMT		1101660066	1470
1410	1420	1430	. 1770			
AGGGCGGGGGCGG	ليستلسب	LILLIAN TO TO	CCCCAATGC	TOCOTOCOCAL	GGCAGGCCCT	GGGATA 1470
AGGGCGGGGGCGG CTACAAGGCAGGG	GGGAGACTCCC	AGGCTTCCT	CGGGAATGC	CTTCCTCAAC	CCCCTCCCTGC	TCCAGT 1540
- rtaraaggcaggg	CAILGGIGIT			・ヘエヘエエCTCTC!	0.	A LLGLA 1010
GCAGCCACAGGAC	AAGGAACAGGC	CACCAATTCC	CTACTGATO	TGAAGGTAAG	CGATCCTICIO	ACCCGC 1680 ATCCCCG 1750
GCAGCCACAGGAC ACATGCAGGCAAA	CACACACACAC	ACACACACAC	CACACCXGGC	CACACAAATAA	ACCIGICACLA	TICCCCG 1750
ACATGCAGGCAAA	CHONOMO			1800	1810	1820
1760	1770	1780	1790			<u> </u>
	سيبلييين	1,700	CCACTIG	TOOTACCATCCT	CCYCCCCCCGT	CTAGAC 1820
CCCCCTAATCC	TGCCACCAGCTT	GGAACACAA	TOCOTOTO	CCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCC	ATGGGGACCC	AGACCTG 1890
TCAGCTCAGAAT	GCATCTGAATAA	XGGCGTGCA	CCATATGAC	TTCTGGCCACG	TCTGCATGTG	TCAATGA 1960
TCAGCTCAGAAT GCTGTCTGCGTG	TATCCTGCTTGC	CAGCGIGAC	CCATGCCAX	AXCCAGCCCT	TCCTTGAGCT	TCCAGX 1 2030
TCAGCTCAGAAT GCTGTCTGCGTG TTGTTCATTCAT CCCTTTCAGCCX	11011110111	TTTATTOON	TTGGGGTCC	CGATGCCCAG	CACAGAGCCIG	ACACAAA 2100
CCCTTTCAGCCX	AGGGGAGCATO	2130	2140	2150	2160	2170
2110	2120		ببلينييين	<u>بيلييياري</u>	<u></u>	CCCCCAG 2170
GGATGAGGCATA	ACCTOCTOAYT	CAGTATCCAA	(ATGGTGGAA	IG I G I G G A G G A	CCCCAGGCAII	CCCTTCA 2240 CAACCCA 2310
CCCTAGCCTTC	CCCACTCCAACC	CACCCAAAG	ACACGAAGT	GCCCAGGAAG	CTGCTGAAGAA	GGCTGTC 2380 ACCACTGA 2450
CTCACGAGTCC	TGACCTTTTCTG		2490		2510	2520
0//00	· 2070	2400				!
<u> والمنتبين المنتبين</u>	<u></u>	LOCCCAGAGI	TATGAGGAC	CCACCCCAGGA	GGAATATCAG	GAGTATGA 2520
TTGAGCCCCTG	ATGGAGCCAGA	ACAGCCCCCA	CCAGCAGCA	CAATTCTGTC	CTGTCCCTGC	GAGTATGA 2520 CCCGCCCC 2590 GGCAACCC 2660
GCCAGAGGCGT	AGGGGCCCAGG	ACTCCTTCTC	CCCAATCAC	GAGATETTEE	TOCALCOCCC	CCCATGGA 2730
CCAGAGCCAGG	CTOTTAGTOTC	TGTCCATCTG	TCTGTCCTA	CCCGCCCGCG	100AAGGGGGG	GGCATGGA 2730 AGCGTCTG 2800
CACCCCACCC	TTGCGGTCGCG	ac i aaanee			7021000000	AGCGTCTG 2800 2870
201	0 2820	2830	284	0 2850) 2860 	
201 <u>1111</u>	0 2820 	سليبيلين	لنبيلين	.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		
CGCG 2804						
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Figure 9

10 20 30 40	
AGGGAGATCCAGCTCCGTCCTGCAGCAGCACAACCC 40 TGCACACCCACCATGGATGTCTTCAAGAAGGGCTTCTCCA 80 TCGCCAAGGAGGGXGTGGTGGGTGCGGTGGAAAAGACCAA 120 GCAGGGGTGACGGAAGCAGCTGAGAAGACCAAGGAGGGG 160 GTCATGTATGTGGGATTACATTTTTTTTTAAAGAAAAGA	-
210 220 230 240	

Figure 10

	10	20	30	40
<u>بىلىي</u> ر		<u></u>		AXGGGG 40
TTTTTTX	AGGGGGGA	AAACAGGGAA	ATAXAAAAAX. AAAAXGGTTX	AXGGGG 40 GGGGX 80
GGGGGTT	1 1 1 X X G G G	. C X	GGGXXAXTX	AAXTTT 120
TCCCAAC	CCAAAGCC	CXAGGAGGAT	TTTTTXGTXA	AXAACG 160
TXACCTC	XAGTGGGX	CGAGGAAGAG	CCAAGGAAAX	GCCCAA 200
	210	220	230	240
سلسب			<u> </u>	10111
CXCGGTT	GAXCGAGG	CTGTGGTGA	ACAXCGTXCA	ACXCTG 240 CSCGGT 280
TGCCCXC	CAAXAXCG	TGGAGGXGG	CGGAGAACAT	COUGHT 200
CACCTCC	GGGGTGGT	GCGCMAGGA	GGACTTGAGG TCCMAAGARA	AAGAGG 360
KCCCCCC	CACACCACGAC	CCCACAGIG	GGGGARACTA	GAGGGC 400
AAGIGGG		420	430	440
	410		1,	* : * * · · · · · · · · · · · · · · · ·
TACAGG	CCAGCGTG	ATGACCTGA	AGAGCGCTCC	CTCTGCC 440
TTCCAC	ACCATCCC	CTCCTAGCAC	CAAGGAGTGC	CCGCCTT 480
CACTCA	CATGCGGC	TGCCCACGCT	CCTGCCCTC	STC11CC 520
TCCCCA	CCCTTGGC	CTGTCCACCT	CTGCTGCTGC	CACCAAC 560
CTCACT	GCCCTCCC	TCGGCCCCAC	CCACCCTCT	
	610	620	630	640
سلبيب	سيبليب			1111111 C''O
CTGACC	CCACTTAT	GCTGCTGTG	AATTIITIII CTCCAAAAAA	TTAAATG 640 AAAA 677
ATTOCA	***	116746666	I. ILI.AAAAAAA	AAAA U//

Figure 11

alpha-SYN exons 1-2

10	20	30	40
	لستبليي	لتبيليين	
AATTTCAGCGATGCGA	GGGCAAAGC	GCTCTCGGCG	GTGCG 40
CTCTCACCTCCC	GGCGCTGCC	TGTCTCCTCC	AGCAG 80
CICCCCAAGGGATAGG	CTCTGCCCL	IGGIGGICGA	66616 120
AGGCCCTCGNTCTCCC	AGGNCGACT	CTGACGAGGG	GIAGG 160
GGGTGGTCCCCNGGAG	GACCCAGAG	GAAAGGCNGG	GACAA 200
210	220	230	240
بالبنيانيين	لسيسلسب		
GAAGGGAGGGAAGGG	GAAAGAGGA	AGAGGCATCA	TCCCT 240
AGCCCAACCGCTCCCG	SATCTCCACA	AGAGTGCTCG	TGACC 280
CTAAACTTAACGTGAG	GCGCAAAAG	CGCCCCAACC	TTTTC 320
CCGCCTTGNNCCAGGC	AGGCGGCTG	GAGTTGATGG	CTCAC 360
CCCGCGCCCCCTGCCC	CATCCCCAT	CCGAGATAG	GACGA 400
410	420	430	440
<u> </u>	لسبيليين		<u> </u>
GGAGCACGCTGCAGGG	BAAAGCAGC	GAGCGCCGGGA	AGAGGG 440
GCGGGCAGAAGCGCTG	GACAAATCA	GCGGTGGGGG	GGAGA 480
GCCGAGGAGAAGGAGA	AAGGAGGAG	GACTAGGAGGA	AGGAGG 520
ACGGCGACGACCAGAA	AGGGGCCCA	AGAGAGGGGG(CGAGCG 560
ACCGAGCGCCGCGAC	CCCAACTGA	CCTCCCTCCCI	GCTCA 600
ACCEAGCECCECGAC	GCGAAG I GA	ad i aca i aca	add ton out
610	620	630	640
610	620	630	640
610 GCGCAGACCCCGGCC	620 CGGCCCCTC	630 CTGAGAGCGT	640 CCTGGG 640
610 GCGCAGACCCCGGCC CGCTCCCTCACGCCT	620 CGGCCCCTC TGCCTTCAA	630 CTGAGAGCGT GCCTTCTGCC	640 CCTGGG 640 TTTCCA 680
610 GCGCAGACCCCGGCCCCGCTCCCTCACGCCTCCCTCACGCCTCCCTC	620 CGGCCCCTC TGCCTTCAA AACTGGGAG	630 CTGAGAGCGT GCCTTCTGCC TGGCCATTCG	640 CCTGGG 640 TTTCCA 680 ACGACA 720
610 GCGCAGACCCCGGCCT CGCTCCCTCACGCCT CCCTCGTGAGCGGAG GGTTAGCGGGTTTGC	620 CGGCCCCTC TGCCTTCAA AACTGGGAG CTCCCACTC	630 CTGAGAGCGT GCCTTCTGCC TGGCCATTCG CCCCAGCCTC	640 CCTGGG 640 TTTCCA 680 ACGACA 720 GCGTCG 760
610 GCGCAGACCCCGGCCCCGCTCCCTCACGCCTCCCTCACGCCTCCCTC	620 CGGCCCCTC TGCCTTCAA AACTGGGAG CTCCCACTC	630 CTGAGAGCGT GCCTTCTGCC TGGCCATTCG CCCCAGCCTC	640 CCTGGG 640 TTTCCA 680 ACGACA 720 GCGTCG 760
610 GCGCAGACCCCGGCC CGCTCCCTCACGCCT CCCTCGTGAGCGGAG GGTTAGCGGGTTTGC CCGGCTCACAGCGGC	620 CGGCCCCTC TGCCTTCAA AACTGGGAG CTCCCACTC CTCCTCTGG 820	630 CTGAGAGCGT GCCTTCTGCC TGGCCATTCG CCCCAGCCTC GGACAGTCCC 830	640 11111 CCTGGG 640 TTTCCA 680 ACGACA 720 GCGTCG 760 CCCCGG 800 840
610 GCGCAGACCCCGGCC CGCTCCCTCACGCCT CCCTCGTGAGCGGAG GGTTAGCGGGTTTGC CCGGCTCACAGCGGC	620 CGGCCCCTC TGCCTTCAA AACTGGGAG CTCCCACTC CTCCTCTGG 820	630 CTGAGAGCGT GCCTTCTGCC TGGCCATTCG CCCCAGCCTC GGACAGTCCC 830	640 CCTGGG 640 TTTCCA 680 ACGACA 720 GCGTCG 760 CCCCGG 800 840
610 GCGCAGACCCCGGCC CGCTCCCTCACGCCT CCCTCGTGAGCGGAG GGTTAGCGGGTTTGC CCGGCTCACAGCGGC 810	620 CGGCCCCTC TGCCTTCAA AACTGGGAG CTCCCACTC CTCCTCTGG 820 TCCTGTGCG	630 CTGAGAGCGT GCCTTCTGCC TGGCCATTCG CCCCAGCCTC GGACAGTCCC 830	640 CCTGGG 640 TTTCCA 680 ACGACA 720 GCGTCG 760 CCCCGG 800 840
610 GCGCAGACCCCGGCCCCCCCCCCCCCCCCCCCCCCCCC	620 CGGCCCCTC TGCCTTCAA AACTGGGAG CTCCCACTC CTCCTCTGG 820 TCCTGTGCG	630 CTGAGAGCGT GCCTTCTGCC TGGCCATTCG CCCCAGCCTC GGACAGTCCC 830 CCTCCTTTTCC	640 CCTGGG 640 TTTCCA 680 ACGACA 720 GCGTCG 760 CCCCGG 800 840 TTCTTC 840 TTTTTT 880
610 GCGCAGACCCCGGCCCCCCCCCCCCCCCCCCCCCCCCC	620 CGGCCCCTC TGCCTTCAA AACTGGGAG CTCCCACTC CTCCTCTGG 820 TCCTGTGCG TATTTGGGA	630 CTGAGAGCGT GCCTTCTGCC TGGCCATTCG CCCCAGCCTC GGACAGTCCC 830 CCTCCTTTTCC ATTGTTTAAA	640 CCTGGG 640 TTTCCA 680 ACGACA 720 GCGTCG 760 CCCCGG 800 840 TTCTTC 840 TTTTTT 880 GTTGTG 920
610 GCGCAGACCCCGGCCCCGCTCCCTCACGCCTCCCTCACGCGAGGCCCCCGGCTTAGCGGGTTTGCCCGGCCCCGCCCTTTTCCTATTAAATATTTTTAAAAAAAA	620 CGGCCCCTC TGCCTTCAA AACTGGGAG CTCCCACTC CTCCTCTGG 820 TCCTGTGCG TATTTGGGA	630 CTGAGAGCGT GCCTTCTGCC TGGCCATTCG CCCCAGCCTC GGACAGTCCC 830 CCTCCTTTTCC ATTGTTTAAA AGGAGTCGGA	640 CCTGGG 640 TTTCCA 680 ACGACA 720 GCGTCG 760 CCCCGG 800 840 TTCTTC 840 TTTTTT 880 GTTGTG 920 TCTAAA 960
610 GCGCAGACCCCGGCCCCCCCCCCCCCCCCCCCCCCCCC	620 CGGCCCCTC TGCCTTCAA AACTGGGAG CTCCCACTC CTCCTCTGG 820 TCCTGTGCG TATTTGGGA	630 CTGAGAGCGT GCCTTCTGCC TGGCCATTCG CCCCAGCCTC GGACAGTCCC 830 CCTCCTTTCC ATTGTTTAAA AGGAGTCGGA GTACCTGTGGA	640 CCTGGG 640 TTTCCA 680 ACGACA 720 GCGTCG 760 CCCCGG 800 840 TTCTTC 840 TTTTTT 880 GTTGTG 920 TCTAAA 960
GCGCAGACCCCGGCCCCGCTCCCTCACGCCTCCCTCACGCCTCCCTC	620 CGGCCCCTC TGCCTTCAA AACTGGGAG CTCCCACTC CTCCTCTGG 820 TCCTGTGCG TATTTGGGA GAGGCGNGG CTCAGGTAAG ATCCTGGAG	630 CTGAGAGCGT GCCTTCTGCC TGGCCATTCG CCCCAGCCTC GGACAGTCCC 830 CCTCCTTTTCC ATTGTTTAAA AGGAGTCGGA TACCTGTGGA TACCTGTGGA TACCTGTGGA TACCTGTGGA	640 CCTGGG 640 TTTCCA 680 ACGACA 720 GCGTCG 760 CCCCGG 800 840 TTCTTC 840 TTTTTT 880 GTTGTG 920 TCTAAA 960 GGAGAC 1000 1040
G10 GCGCAGACCCCGGCCCCGCTCCCTCACGCCTCCTCACGCGGGGGGGG	620 CGGCCCCTC TGCCTTCAA AACTGGGAG CTCCCACTC CTCCTCTGG 820 TCCTGTGCG TATTTGGGA GAGGCGNGG CTCAGGTAAG ATCCTGGAG	630 CTGAGAGCGT GCCTTCTGCC TGGCCATTCG CCCCAGCCTC GGACAGTCCC 830 CCTCCTTTTCC ATTGTTTAAA AGGAGTCGGA TACCTGTGGA TACCTGTGGA TACCTGTGGA TACCTGTGGA	640 CCTGGG 640 TTTCCA 680 ACGACA 720 GCGTCG 760 CCCCGG 800 840 TTCTTC 840 TTTTTT 880 GTTGTG 920 TCTAAA 960 GGAGAC 1000 1040
GLO GCGCAGACCCCGGCC CGCTCCCTCACGCCT CCCTCGTGAGCGGAG GGTTAGCGGGTTTGC CCGGCTCACAGCGGC 810 GTGCCCCTCCGCCCT TTTCCTATTAAATAT TTTTAAAAAAAGAGA GAGAAGCAGAGGGAA CGGGNGTCTTTGGAA	620 CGGCCCCTC TGCCTTCAA AACTGGGAG CTCCCACTC CTCCTCTGG 820 TCCTGTGCG TATTTGGGA AGAGGCGNGG CTCAGGTAAG AATCCTGGAG	630 CTGAGAGCGT GCCTTCTGCC TGGCCATTCG CCCCAGCCTC GGACAGTCCC 830 CCTCCTTTTCC ATTGTTTAAA AGGGAGTCGGA TACCTGTGGA TACCTGTGGA TACCTGTGGA GAACGCCGGAT 1030	640 CCTGGG 640 TTTCCA 680 ACGACA 720 GCGTCG 760 CCCCGG 800 840 TTCTTC 840 TTTTTT 880 GTTGTG 920 TCTAAA 960 GGAGAC 1000 1040
G10 GCGCAGACCCCGGCC CGCTCCCTCACGCCT CCCTCGTGAGCGGAG GGTTAGCGGGTTTGC CCGGCTCACAGCGGC 810 GTGCCCCTCCGCCCT TTTCCTATTAAATAT TTTTAAAAAAAAGAGA GAGAAGCAGAGGGAC CGGGNGTCTTTGGAA 1010 GAATGGTCGTGGGNA GGACCGCTGGGCCA	620 CGGCCCCTC TGCCTTCAA AACTGGGAG CTCCCACTC CTCCTCTGG 820 TCCTGTGCG TATTTGGAA AACCTGGAAG ACCGGGAGGG	630 CTGAGAGCGT GCCTTCTGCC TGGCCATTCG CCCCAGCCTC GGACAGTCCC 830 CCTCCTTTTCC ATTGTTTAAA AGGAGTCGGA TACCTGTGGA TACCTGTGGA TACCTGTGGA GACGCCGGAT CGAGTGGTGCTCC GAGGTGAGTACCTGTGCA	640 CCTGGG 640 TTTCCA 680 ACGACA 720 GCGTCG 760 CCCCGG 800 840 TTCTTC 840 TTTTTT 880 GTTGTG 920 TCTAAA 960 GGAGAC 1000 1040 CCCATGA 1040 CTTGTCC 1080
GLOCAGACCCCGGCCCCGCCCCCCCCCCCCCCCCCCCCCC	620 CGGCCCCTC TGCCTTCAA AACTGGGAG CTCCCACTC CTCCTCTGG 820 TCCTGTGCG TATTTGGAA AACCTGGAAACACCTGGAAACACCTGGAAACACACACACA	630 CTGAGAGCGT GCCTTCTGCC TGGCCATTCG CCCCAGCCTC GGACAGTCCC 830 CCTCCTTTTCC ATTGTTTAAA AGGAGTCGGA TACCTGTGGA TACCTGTGGA GAGCGCGGAT CGAGGTGGTGCTC GAGGTGAGTACCTGGCC	640 CCTGGG 640 TTTCCA 680 ACGACA 720 GCGTCG 760 CCCCGG 800 840 TTCTTC 840 TTTTTT 880 GTTGTG 920 TCTAAA 960 GGAGAC 1000 1040 CTTGTCC 1080 CTTTCGT 1120
G10 GCGCAGACCCCGGCC CGCTCCCTCACGCCT CCCTCGTGAGCGGAG GGTTAGCGGGTTTGC CCGGCTCACAGCGGC 810 GTGCCCCTCCGCCCT TTTCCTATTAAATAT TTTTAAAAAAAAGAGA GAGAAGCAGAGGGAC CGGGNGTCTTTGGAA 1010 GAATGGTCGTGGGNA GGACCGCTGGGCCA	620 CGGCCCCTC TGCCTTCAA AACTGGGAG CTCCCACTC CTCCTCTGG 820 TCCTGTGCG TATTTGGGA ACCGGGAGGC GGCCCTCTGGGGGGGGGG	630 CTGAGAGCGT GCCTTCTGCC TGGCCATTCG CCCCAGCCTC GGACAGTCCC 830 CCTCCTTTTCC ATTGTTAAA AAGGAGTCGGA TACCTGTGGA TACCTGTGGA CACGCCGGAT CAGGTGGTGCTC CAGGTGAGTACCTGGCCCAGCTC CAGGTGAGTACCTGGCCCACAAGGGCTC	640 CCTGGG 640 TTTCCA 680 ACGACA 720 GCGTCG 760 CCCCGG 800 840 TTCTTC 840 TTTTTT 880 GTTGTG 920 TCTAAA 960 GGAGAC 1000 1040 CTTGTCC 1080 CTTTCGT 1120

10	20	30	40
CTTAAAAGAGTCTCAC TTCAGTGTTTTTTGTT CAAAGTGTATTTTATG TCATTAGCCATGGATG CCAAGGAGGGAGTTGT	ACTTTGGAG TATTTTTCC TTTTCCAGT TATTCATGA	CCGAAAGTTC TGTGGTGTAAA AAAGGACTTTC	CTCATT 80 AGAAAT 120 CAAAGG 160
210	220	230	240
GGGTGTGGCAGAAGCA CTCTATGTAGGTAGGT TTGTTCATGAGTGATG GCTGGTAGTTCTCTCT TTGTCAAAAAGGTGGA	GCAGGAAACAACAAACAAACAAACAAACAAAACAAAAC	GACAAAAGAGG AATGTCAGTTT TAACAATACTC ATTTTTGCATG GAGGTATGTG 430	GGTGTT 240 IGGTGC 280 CTAAAT 320 CATTGC 360
GGTGAATGTGAACGTC GCGACTGTTTGCTTTT NTATGACTTNTTAAAA CTATNTCAGAGACAG	CAGATTTT ATGAATGTT	TAATTTTGCC	TAATAT 480

10	20	30	40
للتسليليليل			
CTGCAGGTCAACGGA	TCTGTCTCT	AGTGCTGTAC	TTTTAA 40
AGCTTCTACAGTTCT	GAATTCAAA.	ATTATETTET	CACTGG 80
GCCCCGGTGTTATCT	CATTCTTTT	TTCTCCTCTG	TAAGTT 120
GACATGTGATGTGGG	AACAAAGGG	GATAAAGTCA	TTATTT 160
TGTGCTAAAATCGTA	ATTGGAGAG	GACCTCCTGT	TAGCTG 200
210	220	230	240
			<u> </u>
GGCTTTCTTCTATNT			
TCTAGTTTTAGGATA	TATATATAT	ATTTTTTCT	TTCCCT 280
GAAGATATAATAATA	TATATACTT	CTGAAGATTG	AGATTT 320
TTAAATTAGTTGTAT	TGAAAACTA	GCTAATCAGC	AATTTA 360
AGGCTAGCTTGAGAC	TTATGTCTT	GAATTTGTTT	TTGTAG 400
410	420	430	440
	سيابي	ببيابيين	لىسىل
GCTCCAAAACCAAGG	AGGGAGTGG	TGCATGGTGT	GGCAAC 440
AGGTAAGCTCCATTG			
AGTATCTAGTGATTA			
TGAAATTGTAAAACA			
AGTCTTATTGAAACT	GAATTETTI	TATAAAGTATT	COG AAATTT
610	620	630	640
ليبيلينيا		ببيليتي	
TAGGTAAATATTGAT	TATAAATA	AAAATATACT	TGCCAA 640
GAATAATGAG 650			

		30	: 40
Janeary Land	سيبليب		
ATATETTAGECAAGAT	TCAATGTT	TGGTTGAACC.	ACACTC 40
ACTTGACATCTTGGTG	GCTTTTGT	TICTTCTGAC	CACTCA 80
GTTATCTATGGCATGT	GTAGATAC	AGGTGTATGG.	AANCGA 120
TGGCTAGTGGAAGTGG	AATGATTT	TAAGTCACTG	TTATTC 160
TACCACCCTTTAATCT	GTTGTTGC	TCTTTATTTG	TACCAG 200
	220		240
210 		1,,,,,	
TGGCTGAGAAGACCAA			
AGCAGTGGTGACGGG	TOTOLCARO	. 4 C. 7 4 C. C. C. C. A. C.	AAGACA 280
AGCAGIGGIGALGGG	I G ! GACAGO	AGIAGCCCAG	AAGACA 200
GTGGAGGGAGCAGGG	AGCATIGCA	GCAGCCACTG	GCTTTG 320
TCAAAAAGGACCAGT	TGGGCAAGG	STATGGCTGTG	TACGTT 360
TTGTGTTACATTTAT	AAGCTGGTG	SAGATTACGGT	TCATTT 400
410	420	430	440
COLATOROLACOR	ACCCTCCCC	TTGTGAAAAA	GTGCTA 480
TCATGTGAAGCCTGG GGGAACGGCTACCTG CCTTTATATTGGTCT	AGGCAGGA(ACCCTCCC(CAAGATACTT CTTGTGAAAAA	ACTGTG 440

10	20 1	30 لىيىلىرى	40	_
AAAAGTTTACATACTT CAATGTTTCCCCGGAG TAGTAATATTAAGGTG ACATCCCTATATGTAA TTTTTAAAAGTGAAAA	TGCCATTT	CAAGATCCGT CAAAACATGGT TCATCATGTTC 230	GGCCA 120 TCTGA 160	-
GTGCTTCTTACTTTAA ACAGGAAGGAATTCTG AATGAGGCTTATGAAA CTGAATCTTTCTAACA GTCACATTTCTCTTTC	ATATTAGA GAAGATAT TGCCTTCT	ATGAAGAAGGA GCCTGTGGATO GAGGTAGGAGT CCAAAAACCTO TTAGTGAGAA 430	CCAAG 320 STCATT 360	
GCTCTCTACATGCTCA GAATAGTTTTTACAT AGGAGGAGGAAGATGA GAAATCATATGTAGT TTGACCCTTTACAGG	ATTACGTGG TTTTAAAGG AAGAAGAGG CCACATAGG	ACAACTTGCA GCTCCTTAAAA GAAGAAAGGAT CTTAATATACN	GTAAAA 520 TACTAC 560	_
GAGAATATATTTTT AGTGTAAAGTGGGGA CAGTGCTGATGCGTA GCTGTCT 727	GCCATTTC	CTATCICALIG	GUIGIL BOU	

10	20	30	40
TTTTGATTTTTCTAAT	ATTAGGAAGG		
AACCTGAAGCCTAAGA	AATATCTTTG	CTCCCAGTT	TCTTG 80
AGATCTGCTGACAGAT	GTTCCATCCT	GTACAAGTG	CTCAG 120
TTCCAATGTGCCCAGT	CATGACATTT	CTCAAAGTT	TTTAC 160
AGTGTATCTCGAAGTC	TTCCATCAGO		
210	220	230 	240
CTGTACCTGCCCCCAC			
ACTGAAGTGAATACAT	GGTAGCAGGG	TCTTTGTGT	GCTGT 280
GGATTTTGTGGCTTCA	ATCTACGATG	TTAAAACAA	ATTAA 320
AAACACCTAAGTGACT	ACCACTTATT	TCTAAATCC	TCACT 360
ATTITTTTGTTGCTGT	TGTTCAGAAG		
410	420	430 	440
CTATCATATATTATNA			ATGAT 440
ACTGTCTAAGAATAAT	GACGTATTGT	GAAATTTGT	
TATATNATACTTAAAA	ATATGTGAGG	CATGAAACTA	TGCAC 520
CTATAATACTAAATAT	GAAATTTTAC	CATTTTGC	SATGTG 560
TITTATTCACTTGTGT	TTGTATATNA	AATGGTGAGA	AATTAA 600
610	620	630	640
AATAAAACGTTATCTC			
CCCATCTCACTTTAAT	ΤΑΔΑΔΑΤΑ.	CATCCTTATA	AAGCAA 680
CATGAATTAAGAACTG	ACACAAAGG	CAAAAATA	TAAAGT 720
TATTAATAGCCATTT			
TAGAGAAAATGGAACA	TTAACCCTAG	CACTCGGAA	TTCCCT 800
810	820	830	840
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GAAGCAACACTGCCAC	SAAGTGTGTT	TTGGTATGC	ACTGGT 840
TCCTTAAGTGGCTGTC	GATTOTACAC	I GAAAG I GG	GGTGTT 880 TCTCCC 920
GAAGACCCCAACTACT	TATIGIAGAG	CCTATTTTC	GGGAAC 960
TGTTGTTTGATGTGTA	ATCTCTTTAT	AATTGTTAT.	
	1020	1030	1040
1010			1040
TTAATTGAGCCTTTT			TTTGTC 1040
TCGAAATAATTTTTT			1000
100000000000000000000000000000000000000	AGTTAAAAIC	TATTTTGTC	TGATAT 1080
TGGTGTGAATGCTGT	ACCTTTCTGA	CAATAAATA	ATATNC 1120
TGGTGTGAATGCTGT GACCATGAATAAAA CTAAGCAGTGTAGAA	ACCTTTCTGA AAAAAAAAAA	CAATAAATA GTGGGTTCC	ATATNC 1120 CGGGAA 1160

1210	1220	1230	1240
المستوال المستواليات	ليستليب	<u></u>	
GAGAGCCATAAGACA	CATTAGCACA	TATTAGCACA	ATTCAA 1240
GGCTCTGAGAGAATG	TGGTTAACTI	TGTTTAACTO	CAGCAT 1280
TCCTCACTTTTTTTT	TTTAATCATC	CAGAAATTCTC	CTCTCT 1320
CTCTCTCTTTTTCTC	TCGCTCTCTI		TTTTT 1360
TTTTACAGGAAATGC	CTTTAAACAT	CGTTGGGAAG	CTACCA 1400
1410	1420	1430	1440
1410			
		ستنظفينا	ــــــــــــــــــــــــــــــــــــــ
لسبلسلسل	GAGNATCAAT	TCTCTAGGA	CTGGAT 1440
GAGTCACCTTAAAGG	GAGNATCAAT CTCCTTTAAA	TCTCTAGGAC	CTGGAT 1440 AAATAT 1480
GAGTCACCTTAAAGG AAAAATTTCATGGGC	GAGNATCAA1 CTCCTTTAAA TTTTTCCNTA	TCTCTAGGAC ATGTTGCCCA	CTGGAT 1440 AAATAT 1480 GTTTTT 1520